PATENT

IN THE UNITED STATES DEPARTMENT OF COMMERCE

U.S. PATENT AND TRADEMARK OFFICE

Applicant:. DRESDEN, SCOTT	Docket No: 40809-8001.US02
Serial No.: 10/664,787	Group Art Unit: Unassigned
Filing Date: September 17, 2003	Examiner: Unassigned
For: **NEURAL-BASED INTERNET SEARCH ENGINE WITH FUZZY AND LEARNING PROCESSES IMPLEMENTED BY BACKWARD PROPAGATION**	

PETITION TO MAKE SPECIAL UNDER 37 C.F.R. 1.102(c) and MPEP 708.02 (VIII) BASED ON SEARCH CONDUCTED BY APPLICANT OR OTHER PATENT OFFICE

Mail Stop: Petitions (to Make Special)
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

1.   I, David Bogart Dort, a registered practitioner before the USPTO, have caused to a search for above-referenced invention to be conducted.

2.   The search was conducted by the independent search company NERAC of Tolland, CT. (Scot P. Rogers, search consultant). The search request, the search strategy and the materials returned are included in the appendix to this Petition. The relevant search classes appear to be in the 707/3 Query

Processing and 707/6 Pattern Matching Access categories, in addition to the more general 706/XX Artificial Intellignce categories of 706/2 Fuzzy nerual networks, 706/11 AI having a particular user interface, 706/12/13/14/15 neural and genetic algorithms and 706/18 association neural networks, 706/47 rule-based reasoning systems, 706/50 having specific management of a knowledge base and 706/61 acquisition by a knowledge processing system. However, it is believed that the academic literature references cited below are more relevant to the claimed invention than the patent literature in these clases *per se.*

3.   A copy of each reference believed to be potentially relevant is submitted with this petition and listed on an accompanying IDS.

"Relevance Feedback Based on a Neural Network," by Bordogna, et al., *4th European Congress on Intelligent Techniques and Soft Computing Proceedings,* Sept, 1996, teaches training an associative neural network with relevance feedback for documents provided for search terms.

"Disocvering Text Databases with Neural Nets," by Yong Choi, *Knowledge and Information Systems 3,* Aug. 2001, teaches searching for documents across multiple databases over the web with a neural network that incrementally learns to associate search terms and the performance of the user's search results and propogates the association from the relevance feedback from a user.

"Application of Multilayer Feedforward Networks on WWW Document Search" by Chen et al., *International Joint Conference on Neural Networks,* July

1999 teaches two or three-layer forward feed neural network (with hidden nodes found after receiving feedback) for seaching for Internet documents.

"Towards the Use of Situational Information in Information Retrieval," by Oddy et. al., *Joural of Documentation, vol. 48, No. 2 (June 1992)* teaches detecting a search structure with associated events for use in finding documents based on a Bayesian probabilistic analysis (fuzzy system) or neural networks.

"Evolving Intelligent Text-based Agents," by Yu, et al. *Proceedings of the 4th Int'l Conf. on Autonomous Agents*, June 2000, teaches a neuro-genetic search system using a multilayer feedforward neural network for finding Web documents in which multiple "agents" adapt based on user profiles and performance.

"Internet Categorization and Search: A Self-Organizing Approach," by Chen et al., *Journal of Visual Communication and Image Representation , Vol. 7, No. 1, March 1996,* teaches machine learning algorithms based on a textual analysis of Internet documents through a self-organizing map of 2 dimensions for N-characteristics (a variation on the Kohonen map).

NERAC Search Results for NEURAL NETWORK SEARCH ENGINES and related Strategy for searching, May 21, 2003 (Scot P. Rogers, search consultant).
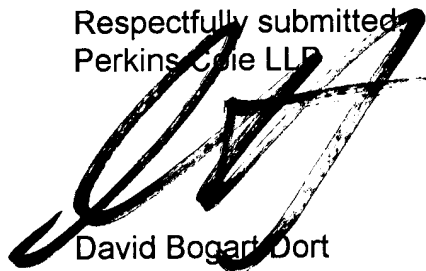
In addition, the references cited in the Background section of the present Application and the related discussion(s) are incorporated by reference. These

references are included on a PTO-1449, included with the filing of this document.

4. The common aspect of the above-listed teachings is, among other things, they do not teach or suggest the feature of the presently claimed invention where the neurodes or input criteria for the neural networks each respond to different characteristics of documents, including both at least one of each textual/content and non-textual document characteristics and are reweighted at the input or neurode level, requiring less computing power for processing and/or pattern recognition for relevant search results.

The Commissioner is authorized to charge the Petition fee of $130.00 under 37 C.F.R. 1.17(h) to Deposit Account No. 50-2283 (Docket 40809-8001.US02).

Respectfully submitted,
Perkins Coie LLP

Date: October 15, 2003

David Bogart Dort
Registration No. 50,213

Correspondence Address:
Customer No. 22918
Perkins Coie LLP
101 Jefferson Drive
Menlo Park, CA 94025
Telephone: (202) 434-1608
Facsimile: (202) 434-1690
E-Mail: ddort@perkinscoie.com